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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/580,601	05/26/2000	Teruto Hirota	2000 0660A	8334

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EXAMINER	
VAUGHAN, MICHAEL R	
ART UNIT	**PAPER NUMBER**
2131	4

DATE MAILED: 12/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/580,601	HIROTA ET AL.	
	Examiner	Art Unit	
	Michael R Vaughan	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 May 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 May 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *3*.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claims 1-20 have been examined and are pending.

Information Disclosure Statement

An initialed and dated copy of Applicant's IDS form 1449, Paper No. 3, is attached to the instant Office action.

Drawings

Formal drawings are required in response to the instant Office action.

The drawings are objected to because figures 6,7, 43a-47b and 60 fail to comply with 37 CFR 1.84(p). Figure 60 also fails to comply with 37 CFR 1.84(p)(3) as well. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC ' 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 2, 6, 7, 8, 11, 12, 13, 16, 17, 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Peterson (USP 5,857,020).

As per claims 1, Peterson teaches a semiconductor memory card that stores at least one audio track, comprising:

a protected area that can be accessed by a device connected to the semiconductor memory card only if the device has been found to be authentic

(column 5, lines 15-17), the protected area storing an encryption key sequence composed of a plurality of encryption keys arranged into a predetermined order (column 5, lines 33-40); and

an unprotected area that can be accessed by any device connected to the semiconductor memory card, the unprotected area storing at least one audio track and management information (column 5, lines 15-23);

the at least one audio track including a plurality of encrypted audio objects (column 5, lines 34-40); and

the management information showing which encryption key, out of the plurality of encryption keys, corresponds to each audio object stored in the unprotected area (column 5, lines 15-23).

As per claim 2, Peterson teaches the management information shows, for each audio object, a storage position of the audio object and a number showing a position in the encryption key sequence of the encryption key that corresponds to the audio object (column 5, lines 15-23).

As per claims 6, 11, and 16, Peterson teaches semiconductor memory card that stores at least one audio track, comprising:

a protected area that can be accessed by a device connected to the semiconductor memory card only if the device has been found to be authentic (column 5, lines 15-17), the protected area storing an encryption key sequence

composed of a plurality of encryption keys arranged into a predetermined order (column 5, lines 33-40); and

an unprotected area that can be accessed by any device connected to the semiconductor memory card, the unprotected area storing at least one audio track and management information (column 5, lines 15-23);

the at least one audio track including a plurality of encrypted audio objects (column 5, lines 34-40); and

the management information showing which encryption key, out of the plurality of encryption keys, corresponds to each audio object stored in the unprotected area (column 5, lines 15-23),

the playback apparatus comprising:

reading means for reading one of the plurality of audio objects included in the at least one audio track from the semiconductor memory card and reading an encryption key that corresponds to the read audio object from the encryption key sequence stored in the protected area of the semiconductor memory card (Fig 1, elements 12 and 24);

decrypting means for decrypting the read audio object using the read encryption key (column 9, lines 21-32 and Fig. 46); and

playback means for playing back the decrypted audio object (column 9, lines 21-32);

wherein when the decrypting means has finished decrypting the read audio object, the reading means reads a different audio object included in an audio track (column 9, lines 21-32),

reads an encryption key corresponding to the different audio object from the encryption key sequence (column 9, lines 21-32), and

supplies the newly read encryption key to the decrypting means (column 9, lines 21-32).

As per claims 7, 8, 12, 13, 17, and 18, the examiner supplies the same teachings as recited in the rejection of claims 1 and 2 to address the limitations of claims 7, 8, 12, 13, 17, and 18. It in inherent that from the teachings of Peterson, which disclose how recorded data is read and decrypted from a memory card that he also suggests the format at which the data was recorded. Reading the specifics data format (i.e. data blocks and corresponding keys) takes in account how the data was originally recorded. Therefore, Peterson's teachings clearly disclose how one skill in the art can record data to a memory card.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 10, 15, and 20 are rejected under 35 U.S.C. 102(a) as being anticipated by Kihara et al (GB 2,351,819 A).

As per claims 10, 15, and 20, Kihara et al teach a recording apparatus for a semiconductor memory card, comprising:

first generating means for successively generating audio frames from an input signal received from outside the recording apparatus, an audio frame being a smallest amount of data that can be independently decoded (pg. 10);

writing means for creating a file on the semiconductor memory card and writing the successively generated audio frames into the file (pg. 11);

second generating means for generating, whenever the writing means has written a predetermined number of audio frames into a file, a piece of entry information showing a data length of an audio element that is composed of the audio frames written into the file (pgs. 37-38),

wherein whenever the second generating means has generated a predetermined number of pieces of entry information, the writing means creates a new file and writes the audio frames successively generated thereafter into the new file (pgs. 37-38).

Claim Rejections - 35 USC ' 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the

subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 4, 5, 9, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson in view of Kihara et al (GB 2,351,819 A).

As per claims 3, 9, 14, and 19, Peterson fails to teach each audio track further includes

(1) attribute information and

(2) link information for each audio object included in the audio track,

the attribute information showing a type, out of type (a) , type (b) , type (c) and type (d) , for each audio object,

type (a) being an entire audio track,

type (b) being a first part of an audio track,

type (c) being a middle part of an audio track, and

type (d) being an end part of an audio track, and the link information for each audio object that is type (b) or type (c) showing which audio object follows the audio object.

Kihara et al which, also disclose a smart memory card for digital audio recording and playing, teach that each audio track further includes

(1) attribute information (pg. 37) and

(2) link information (pg. 47) for each audio object included in the audio track, the attribute information showing a type, out of type (a) , type (b) , type (c) and type (d) , for each audio object,

type (a) being an entire audio track,

type (b) being a first part of an audio track,

type (c) being a middle part of an audio track, and

type (d) being an end part of an audio track, and the link information for each audio object that is type (b) or type (c) showing which audio object follows the audio object (pgs. 37-56). Kihara et al disclose in detail the file format for encoding digital audio onto a memory card. The memory card is very similar to the one disclosed in Peterson's teaching.

In view of this, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teaching of Kihara et al within the system of Peterson because Kihara discloses in more detail the way in which the digital files of Peterson can be written. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

As per claim 4, Peterson teaches the plurality of audio objects includes:

at least one audio object that only contains valid data that needs to be played back (column 5, lines 15-23); and

at least one audio object that contains (1) valid data and (2) invalid data located at least one of before and after the valid data, the invalid data not needing to be played back(column 5, lines 15-23);

Peterson is silent in expressly disclosing information including:

an offset measured from the storage position of the corresponding audio object given in the management information; and

length information showing a length of the valid data that starts from a position indicated by the offset,

the attribute information for an audio object showing whether the valid data indicated by the offset and the length information

(a) corresponds to an entire audio track,

(b) corresponds to a first part of an audio track,

(c) corresponds to a middle part of an audio track,

or

(d) corresponds to an end part of an audio track.

Kihara et al disclose information including:

an offset measured from the storage position of the corresponding audio object given in the management information; and

length information showing a length of the valid data that starts from a position indicated by the offset,

the attribute information for an audio object showing whether the valid data indicated by the offset and the length information

(a) corresponds to an entire audio track,

(b) corresponds to a first part of an audio track,

(c) corresponds to a middle part of an audio track,

or

(d) corresponds to an end part of an audio track (pgs. 37-52).

The examiner supplies the same rationale for the motivation as recited in the rejection of claim 3 to include the teachings of Kihara et al within the system of Peterson to disclose the details of the file format including the header, key, offset, etc. of the memory card.

As per claim 5, Peterson teaches audio tracks can be played back according to standard playback or intermittent playback,

standard playback being a mode where the valid data in the audio objects composing the audio tracks is played back without any valid data being omitted and

intermittent playback being a mode where (1) omission of valid data equivalent to a first period and (2) playback of valid data equivalent to a second period, are repeated (column 5, lines 15-23).

Peterson is silent in expressly disclosing:

each audio track further including a plurality of pieces of entry position information that show internal positions of the valid data within the audio object at intervals that are equivalent to the first period,

and the block information for an audio object showing:

the offset that indicates a difference between (1) the internal position shown by a first piece of entry position information for the audio object and (2) the storage position for the audio object given in the management information; and

a length of the valid data that starts at a position indicated by the offset.

Kihara et al disclose each audio track further including a plurality of pieces of entry position information that show internal positions of the valid data within the audio object at intervals that are equivalent to the first period,

and the block information for an audio object showing:

the offset that indicates a difference between (1) the internal position shown by a first piece of entry position information for the audio object and (2) the storage position for the audio object given in the management information; and

a length of the valid data that starts at a position indicated by the offset (pgs. 37-52 and 56-68.

The examiner supplies the same rationale for the motivation as recited in the rejection of claims 3 and 4 to include the teachings of Kihara et al within the system of Peterson to disclose the details of the file format including the header, key, offset, etc. of the memory card.

Remarks

No claim is allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patents:

6,212,097	Okaue et al.
6,262,915	Utsumi
6,501,163	Kihara et al.
6,601,140	Kihara et al

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael R Vaughan whose telephone number is 703-305-0354. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

MV
Michael R Vaughan
Examiner
Art Unit 2131

AYAZ SHEIKH
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